

Abstract

The invention forms a 1T Static Random Access Memory (SRAM) with a low concentration cell node region and a higher concentration bit line region (e.g., second bit line region). The method of the invention forms a 1T Static Random Access Memory (SRAM) that uses a resist mask to block a high concentration implant into the cell node region, but allows the high concentration implant into the bit line region to form a second (high concentration) bit line. The invention's 1T SRAM, with the low concentration cell node, has reduced p-n junction leakage at the cell node and increase data retention time.